WHAT IS CLAIMED IS:

1. A process for producing a tricarbonitrile corresponding to formula I

wherein n is an integer from 2 to 11,

which comprises forming an intermediate in a first stage in the presence of a strong base from an aliphatic α - ω -dinitrile corresponding to formula II,

$$NC - CH_2 - CN$$
 (II)

wherein n is an integer from 3 to 12, and reacting the intermediate in a second stage to form a trinitrile corresponding to formula I by the addition of acrylonitrile.

- 2. The process of Claim 1 wherein said aliphatic α - ω -dinitrile comprises adiponitrile.
- 3. The process of Claim 1 wherein the synthesis is carried out as a one pot reaction.
- 4. The process of Claim 1 wherein the strong base is added in an amount of 0.5 to 2 equivalents, based on the α - ω -dinitrile.
- 5. The process of Claim 1 wherein the strong base is added in an amount of 1 to 1.5 equivalents, based on the α - ω -dinitrile.
- 6. The process of Claim 1 wherein the first reaction stage is carried out at a temperature of 70 to 120 °C.

7. The process of Claim 1 wherein the second reaction stage is carried out at a temperature of 0 to 120 $^{\circ}$ C.